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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/933,822 09/19/97 BOWERS

C 30-2138CIP1

IM22/0222

EXAMINER

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ART UNIT PAPER NUMBER

1733

11

DATE MAILED: 02/22/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. <b>08/933,822</b>	Applicant(s) <b>Bowers</b>
	Examiner <b>Sam Chuan Yao</b>	Group Art Unit <b>1733</b>

Responsive to communication(s) filed on Jan 12, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claims

Claim(s) 1-16 and 18-21 is/are pending in the application.

Of the above, claim(s) 1-15, 19, and 20 is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 16, 18, and 21 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 16, 18, and 21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 09/143,583 in view of Stahlecker et al (US 4,495,758).

The essential difference between the recited claims of the present application and claims 1-3 of Application '583 is: the claims of Application '533 does not explicitly recites wrapping uniformly the binder fibers around the bundle fiber. However, such would appear to flow naturally from the recited process of Application '583 in view of the similarity of the processes. In any event, such would have been obvious in the art because it is known in the art to form yarns where a binder strand is spirally wrapped around a core strand; and because a preference whether to

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uniformly wrap a binder fiber material around a bundle fiber or not is well within the purview of choice in the art, only the expected result on combining the binder fiber material to the bundle fiber would have been achieved.

This is a provisional obviousness-type double patenting rejection.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lofquist (US 5,478,624).

With respect to claims 16 and 21, Lofquist discloses a process of making synthetic yarn having a heat-activated binder fiber, the process comprises:

- a) providing a bulk continuous filament base fiber,
- b) commingling the heat-activated binder fibers with the bulk continuous base fiber to form a commingled yarn, the binder fibers have a melting range of 165-190°C;
- c) twist-setting at least two yarns to form a plied yarn using a Suessen or Superba processes and the plied yarn comprises about 1-12% weight of binder fibers;

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d) heating the plied yarn to melt the binder fibers; and then  
e) cooling the heated yarn to harden the binder fibers (col. 1 line 62 to col. 2 line 22; col. 3  
line 15 to col. 4 line 29; col. 7 line 35 to col. 8 line 17).

Lofquist does not expressly teach using either a ring spinning or wrap spinning technique to form the yarn which comprises the base fibers and the binder fibers. However, absent any showing of unexpected benefit/result, it would have been obvious in the art making the synthetic yarn of Lofquist to either ring spin or wrap spin the base fibers and the binder fibers together to form the yarn because it is conventional in the art to make yarns by either ring spinning method or wrap spinning method; and because it is well within the purview of choice in the art to chose on whether to form yarns by the method taught by Lofquist or other conventional yarn making methods such as ring spinning or wrap spinning, only the expected result of effectively forming a yarn having base fibers and binder fibers would have been achieved in using any one of the well known methods.

Though not expressly disclosed, it would appear that the process of making yarns using the modified process taught by Lofquist where the ring spinning or wrap spinning method is used, the binder fiber material would appear to be uniformly wrapped around the base fibers, because of the similarity of the processes. In any event, it would have been in the art making the yarn of because it is known in the art to form a yarn where a binder strand is spirally wrapped around a core strand; and because a preference whether to uniformly wrap a binder fiber material around a

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bundle fiber or not is well within the purview of choice in the art, only the expected result on combining the binder fiber material to the bundle fiber would have been achieved.

With respect to claim 18, since Lofquist teaches using a yarn from a base fiber prior to commingling it with binder fibers (col. 3 lines 37-41); and since it is conventional in the art to form yarns by spinning a fiber bundle; this claim would have been obvious in the art making the synthetic yarn of Lofquist.

***Response to Arguments***

5. Applicant's arguments with respect to claim 16 has been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Sam Chuan Yao** whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Thursday from 8:00 AM-5:30 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mike Ball, can be reached on (703) 308-2058. The **fax number** in Group Art Unit 1733 for any official papers (i.e. papers that will be entered as part of the file wrapper) is (703) 305-7718 and for unofficial papers (e.g. proposed amendments) is (703) 305-7115.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

**Sam Chuan Yao**  
**Primary Examiner**  
**Art Unit 1733**

scy  
February 18, 2000